



STATE OF FLORIDA  
**AGENCY FOR HEALTH CARE ADMINISTRATION**

August 6, 1998

Ms. Nancy-Ann Min DeParle  
Administrator  
Department of Health & Human Services  
Health Care Financing Administration  
7500 Security Boulevard, C-3-18-26  
Baltimore, MD 21244-1850

Dear Ms. DeParle:

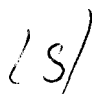
Florida is very pleased to accept your award for the waiver "Extending Medicaid Family Planning Benefits for Postpartum Women" and the Department of Health & Human Services' Terms and Conditions, and Protocols.

Enclosed is the Administrative and Operational Protocol for Florida's Family Planning Waiver. We have responded to all administrative and operational issues presented in Attachment B of the Terms and Conditions document dated August 6, 1998.

I appreciate your efforts on behalf of the people of Florida. I am concerned, however, about the waiver effective date of September 1, 1998. As you know, Florida was prepared to initiate this project in July. I understand that the approval letter was delayed for administrative reasons. However, I urge you to permit us to begin outreach activities on August 10, 1998 and allow us to receive federal reimbursement for these efforts. We recognize that outreach is vital to the success of our waiver in reaching women eligible for family planning services.

Thank you for your continued assistance. If you require additional information, please call Bob Sharpe, Bureau Chief, Medicaid Program Development at (850) 487-2958.

Sincerely,

  
for Richard T. Lutz, Director  
Division of State Health Purchasing

Attachment

cc: Mr. Eugene Grasser, HCFA Regional Office

MEDICAID ADMINISTRATION  
P.O. BOX 13000 • TALLAHASSEE, FLORIDA 32317-3000

LA WTON CHIEFS GOVERNOR

# FLORIDA FAMILY PLANNING WAIVER

## Administrative and Operational Protocol August, 1998

**Introduction.** Under the Special Terms and Conditions and Attachment B, established by the Health Care Financing Administration (HCFA), the state of Florida is required to submit a protocol document that provides a single source for policy and operating procedures applicable to this demonstration project no later than 60 days prior to the implementation date.

This protocol has been developed jointly by the Florida Department of Health (DOH) and the Agency for Health Care Administration (AHCA).

The demonstration, which consists of two components, outreach and services, will last for five years. The outreach component will begin on August 10, 1998, and the service component will begin on September 1, 1998. If, during the course of the demonstration this protocol must be amended, DOH and AHCA will develop the necessary changes and submit them to HCFA for approval at least 90 days before the proposed date for the change to take place. The protocol addresses the issues in the order in which they were presented on Attachment B.

**1. The organizational and structural administration that will be in place to implement, monitor, and run the demonstration, and the tasks that each will perform.**

In collaboration with the Florida Department of Health, AHCA will implement, monitor, and operate the demonstration. Staff in the AHCA Medicaid Program Development and Medicaid Waivers Section have been designated to perform the necessary tasks outlined in the Special Terms and Conditions. The AHCA contact for the waiver is Alan Strowd.

**2. A complete description of Medicaid family planning services covered under the demonstration.**

**a. Initial Family Planning Visit.** The following minimum components must be provided during an initial family planning visit and documented in the recipient's medical record: health history, pre-examination education session, physical examination, required laboratory tests, selection of contraceptive method, provision of supplies, and post-examination interview.

**b. Annual Family Planning Visit.** The following minimum components must be provided during a family planning annual visit and documented in the recipient's

medical record: updating the original data in the patient record, physical examination; required laboratory tests; addressing renewal needs of contraceptive method; and post-examination interview.

- c. **Counseling Visit.** Counseling visits are rendered to discuss the family planning method chosen, or to discuss other available methods. The following components must be provided and documented in the recipient's medical record: all information necessary to increase the recipient's understanding of and motivation for family planning, provision of supplies for the contraceptive method, and identification of any problems with the current birth control method.
- d. **Supply Visit.** Services during a supply visit are rendered to assess the recipient and to provide family planning supplies such as birth control pills or condoms. The following minimum components must be provided and documented in the recipient's medical record: check of weight and blood pressure, check for any side effect of medications, and provision of supplies or prescriptions for the contraceptive method.
- e. **Laboratory Services.** Laboratory tests performed during the above visits may include: hemoglobin and/or hematocrit, urinalysis, cervical pap smear, screening for sexually transmitted diseases, rubella titer, tuberculin skin test, and pregnancy test.
- f. **Other Services.** Other family planning services include: norplant services consisting of the system, insertion, and removal with re-insertion; IUD services, including the system, insertion and removal; diaphragm and cervical cap services, including the device and the fitting of the device; Depo-provera; colposcopy and colposcopy with biopsy (at the state's standard Medicaid FFP); and sterilization.
- g. **Treatment of Abnormal Lab Results.** Treatment of abnormal lab results will include: antibiotics necessary for treatment of vaginal, urinary tract infections, or sexually transmitted diseases, and referral as needed to other health care providers (at the state's standard Medicaid FFP).
- h. **Transportation Services.** Transportation services, which may include taxi, bus, other public transportation options (at the state's standard Medicaid FFP).

**3. A description of the provider capacity and provider education plans for this program.**

Florida Medicaid is confident there is a sufficient number of enrolled family planning providers in addition to its extensive MediPass provider network, which includes approximately 5,200 providers.

The 67 county health departments have more than 200 satellite clinics located throughout the state. There are 95 Federally Qualified Health Centers (FQHCs) located in areas of medically underserved populations and 116 Rural Health Clinics (RHCs) in designated areas.

All of these providers are qualified to provide family planning services to Medicaid patients. We will heighten awareness of the availability of the program to MediPass providers, the county health departments, RHCs and FQHCs with announcements provided through our quarterly Medicaid Bulletin, Remittance Voucher Banners, and Provider Letters. The Florida Department of Health (DOH) will initiate a media campaign in August 1998 that will be directed toward all types of providers. The campaign will be conducted with pamphlets, radio and television announcements, billboards and posters. Additionally, both DOH and AHCA staff will make presentations to various provider organizations and interest groups on an ongoing basis.

4. **A detailed plan for monitoring the coordination of care, utilization, and payment for services. (This must ensure that all necessary services are provided to customers without duplicate payments being made, including a quarterly report requirement, and also how a patient's confidentiality will be protected.)**

There will be no duplication of family planning services in the Florida Medicaid Program. A special eligibility category of "FP" will be created in Florida's Medicaid Management Information System (FMIS) to accommodate the target population. Members of the target population due to lose Medicaid coverage will be moved to the new FP eligibility category and will become eligible for waiver services. Existing FMIS edits will control the quantity of family planning services provided to any individual. FMIS reports will be requested in order to monitor participation in the waiver program and the services provided. The State will provide to HCFA on a quarterly basis the number of eligible member/months for demonstration participants. The State will also comply with HCFA's requirement to provide expenditure data on the HCFA Form 64.

The confidentiality of recipients of family planning waiver services will be maintained as it is for all other Medicaid services. Florida's Medicaid Provider Reimbursement Handbook states that all information about Medicaid recipients is confidential under federal law. Information cannot be released without the patient's written consent unless the provider is billing a third party or releasing the information to a billing agent. Billing agents must adhere to all federal and state confidentiality requirements. The State places restrictions on the release of any information about **AIDS** testing and treatment, and sexually transmitted diseases (STDs). A signed release must state what specific information the patient is giving permission to release. General medical releases are not allowed. A parent or guardian cannot be informed of the dependent's medical care related to **AIDS** or STDs without the dependent's written permission. This information is also contained in the Florida Medicaid Provider Reimbursement Handbook.

**5. A plan outlining outreach strategies and related activities.**

AHCA and DOH will work jointly to build on existing public awareness efforts to promote family planning services. The Department of Health will create a Public Awareness Task Force that will include AHCA and other organizations involved in family planning services throughout the state. The Task Force will facilitate the support and collaboration of other involved agencies and programs and serve as the guiding force in the further refinement and development of the public awareness activities. DOH and AHCA will contract with the University of South Florida College of Public Health (USF COPH) to coordinate the task force organization and meetings.

The Medicaid system will be coded to generate notices to recipient women who are losing their Medicaid eligibility. The notice will explain that the recipient is no longer eligible for Medicaid but can continue to receive Medicaid coverage for family planning services; the notice will also contain information about the family planning services available.

DOH will contract with a professional advertising agency to develop the media components of the outreach campaign. The contractor will use high visibility advertising, radio and television and public service announcements. DOH and the contractor will coordinate consumer testing through focus groups and other social marketing techniques; outreach materials will reflect the cultural diversity of the state. Other elements of the media campaign will include outdoor advertising, i.e., billboards, bus placards and kiosks.

USF COPH, in collaboration with AHCA and DOH, will also produce a video teleconference to train DOH and AHCA staff and family planning providers about the waiver services and how the program will operate. The video teleconference will be broadcast live throughout the state with viewing sites conveniently located and time allotted for questions and answers. DOH and AHCA staff will also make presentations regarding the family planning waiver and services at conferences held for professional organizations and associations that may have an interest in the waiver services.

AHCA and DOH will also promote public awareness/outreach activities through their newsletters, quarterly staff meetings, provider letters and any other mechanisms that provide outreach opportunities.

**6. A comprehensive description of the enrollment and disenrollment process with specifics on issuing identification cards.**

Eligibility for Florida Medicaid is determined by the Department of Children and Family Services (DCF), Office of Economic Self Sufficiency Services, in the 15 DCF district offices. When a Medicaid recipient is due to lose eligibility, a system-generated notice is mailed to the recipient giving the recipient notice of Medicaid termination.

With this waiver, members of the target population, who are not eligible for Medicaid coverage through another category, will also receive a notice sent by the Medicaid fiscal agent informing them of their continued eligibility for family planning services. This notice will include an explanation of the family planning services available to them.

A special eligibility category (FP) will be created in FMMIS to accommodate the target population. Members of the target population due to lose Medicaid coverage will be moved to the new eligibility category and will automatically become eligible for extended family planning services.

Women deemed eligible for these extended services will retain their Medicaid identification card. Providers will continue to use the eight-digit number on the front of the Medicaid identification card to access the recipient's file and verify eligibility.

Members of the target population will receive Medicaid coverage of family planning services for two years after losing their regular Medicaid benefits. A woman eligible for the waiver services will be identified by procedure/diagnosis codes that indicate she gave birth, experienced a miscarriage, or had other termination of pregnancy paid for by Medicaid within a two-year period prior to her losing Medicaid coverage. Any change in family income or resources, whether reported or not while she is enrolled in the waiver program, will be disregarded. Loss of eligibility will occur only when a woman moves from the state, becomes pregnant or otherwise Medicaid eligible, or disenrolls.

Enrollment in the project will take place continuously throughout the duration of the project.

**7. The complaint, grievance, and appeal policies that will be in place at the State level.**

Participants in the extended family planning services program will have access to the same grievance procedures presently used by the Florida Medicaid Program.

The Fiscal Agent sends a brochure with a Medicaid ID card providing the recipient with "hotline" phone numbers to report complaints. This brochure contains a telephone number for complaints against health care practitioners and a number for complaints against HMOs.

When the state's Medical Quality Assurance Consumer Services receives a call, staff makes a determination of whether the complaint warrants an investigation. The Managed Health Care Bureau of AHCA's Division of Health Quality Assurance performs investigations of quality of care complaints involving managed care organizations. **This** bureau also manages the Statewide Provider and Subscriber Assistance Panel which hears, mediates and troubleshoots consumer and plan grievances.

**8. Basic features of the administrative and management data system, enhancements, capabilities, testing results and time elements.**

The State will use FMMIS as a data source in the administration and management of this waiver. FMMIS is a General Systems Design (GSD) compliant system used by the state of Florida for the payment of Medicaid claims. The system consists primarily of a claims history file, an eligibility system and a reference system. The claims history file includes all claims submitted to the state for reimbursement under the Medicaid Program. All claims for physician services, hospitalizations, prescription drugs and all other Medicaid program components reside in the history file. The eligibility system includes entries for each person eligible for Medicaid services. This system provides information on the periods and categories of eligibility as well as demographic data related to individuals eligible for Medicaid. The reference system includes data on payment rates for various Medicaid covered services. Physician fees, hospital reimbursement rates, and drug pricing information are among the components of this system.

**9. A description of the process for reporting demonstration expenditures and eligible member/months.**

AHCA will report waiver expenditures and eligible member/months as we would for any 1115 waiver. AHCA will utilize the HCFA-37 form to estimate matchable Florida Medicaid demonstration expenditures. AHCA will also submit the HCFA-64 form to indicate actual Medicaid expenditures. We will submit both forms on a quarterly basis. Waiver expenditures will be tracked in FMMIS and will be distinguishable from non-demonstration Medicaid expenditure estimates and actual costs. Waiver recipients will have a special code associated with their enrollment in the waiver and all family planning services they receive can be segregated from all non-waiver services.

**10. A detailed implementation schedule.**

Florida has already taken several steps to implement this waiver:

- e AHCA initiated discussions with the Florida Department of Health to implement an advertising campaign to promote outreach strategies and related activities. We have formulated plans to reach both prospective recipients and providers.
- e AHCA staff have prepared and amended a Client Service Request (CSR) to operationally implement the waiver program. Our fiscal agent, Unisys, has instituted the necessary programming and is testing their work.
- e AHCA and DOH have worked with the University of South Florida, College of Public Health (USF-COPH), Lawton and Rhea Chiles Center to develop protocols to comply with HCFA's waiver evaluation requirements.

- AHCA staff, in consultation with DOH, has developed provider and recipient notices informing them about the new extended family planning services.

### **August 1998**

- e AHCA, DOH and CPH will finalize contracts to provide waiver outreach services.
- e DOH and AHCA will establish a Public Awareness Task Force that will collaborate with other agencies to facilitate the outreach campaign.
- The CPH will develop radio, television and public service announcements to address the family planning program and its services.
- e The CPH will develop brochures in English, Haitian/Creole and Spanish that are targeted to women in need of family planning services.
- e The DOH and AHCA will provide training for DOH and AHCA staff about the extended family planning services waiver.
- e AHCA will finalize provider letters that will inform all family planning providers about the waiver program, its services, the profile of potential waiver candidates, how to verify eligibility and how to file claims. The letters will be generated through the FMMIS.
- e The USF, CPH, Lawton and Rhea Chiles Center and AHCA will finalize the plans for evaluating the program and for measuring budget neutrality.

### **September/October 1998**

- e AHCA will generate notices through the FMMIS to the targeted eligible women advising them of the availability of family planning services and how to obtain them.
- AHCA and DOH staff and the Task Force will develop plans to further promote on-going awareness of the waiver.
- e AHCA and DOH staff will make presentations to provider and special interest groups and professional organizations about the extended family planning services program.
- e The CPH and agency will begin collecting data to create the required reports for evaluating both budget neutrality and the waiver hypotheses. The agency will submit all required reports that will be due after the first quarter of implementation.



## EVALUATION DESIGN

### BACKGROUND

As provided for in Florida's 1115 waiver application to extend family planning benefits to post-partum women, the Agency for Health Care Administration (Agency) will contract with the University of South Florida (USF) College of Public Health, Lawton and Rhea Chiles Center for Healthy Mothers and Babies to design, implement and evaluate the waiver. The Center was established by USF Dean Charles S. Mahan, M.D., an internationally recognized expert in maternal and child health. While serving as the State Health Officer, Dr. Mahan directed the design and implementation of the Healthy Start Initiative for Governor Chiles and the Florida Legislature. In this role, he recognized the need for program outside expertise to ensure that the program remained on the cutting edge of services to women. This led Dr. Mahan to found the Lawton and Rhea Chiles Center for Healthy Mothers and Babies to provide the technical oversight and monitoring needed by the program.

The Center remains active in providing training and technical assistance to the Healthy Start Coalitions. Since the coalitions were formed, the percentage of low birth weight babies has declined and for the first time in history the infant mortality rate is below the national average.

One of the major ways the center has provided technical assistance is by providing coalitions with data on outcome and other measures of performance. Since 1991, the center has created a comprehensive data base that merges data on pregnancy outcome from several sources. Medicaid eligibility data has been merged with vital statistics data from birth and death records, Healthy Start Screening data, and Women Infant and Children (participation data). Each year the center publishes data statewide data on outcomes. County-specific data are also available. Plans are underway to include financial and Healthy Start service data. It is this rich data base which will serve as the foundation for the evaluation of the family planning waiver.

The Center will be responsible for the following:

- Calculate baseline data on subsequent rates of pregnancy, interpregnancy interval, and selected birth outcomes by payer for any second deliveries for post-partum women losing eligibility for Medicaid using data available since 1991 from the data base maintained by the provider where Medicaid eligibility data is merged with birth certificate data.
- Determine pre-project costs of pregnancy, delivery and first year child care costs for women delivering a second paid Medicaid birth who lost eligibility post-partum.

- Conduct in-person interviews with post-partum women losing eligibility for Medicaid to determine effectiveness of program outreach.
- Design and implement a client satisfaction survey that is statistically valid at the 95 percent confidence level with an accuracy of plus or minus 5 percent to assess participants' knowledge of the program, attitudes toward family planning experience of services received, and their perceptions of program strengths or weaknesses.
- Conduct focus groups with women who become pregnant within two years of eligibility for waiver services to determine what, if any, problems or barriers they experiences in use of services,
- Design and implement a key informant provider survey that examines the extent to which the project was implemented as designed, service accessibility, service quality, and needed changes.
- Test project hypotheses.
- Complete a written report at the end of each project year which includes: a) demographic profile of project eligibles by when and extent to which they access family planning services or not, b) comparison of waiver participants' use of family planning services to other Medicaid post-partum women, c) results of any qualitative analyses conducted during the year, d) number of subsequent pregnancies, interpregnancy interval, and birth status by payer of second delivery, e) extent to which enrollment, service utilization and savings projections were achieved, and f) any recommendations for improving project performance.
- Prepare a final evaluation report which addresses the initial evaluation plan as approved by HCFA and the Agency and which at a minimum includes the following: a) summary of the results of all qualitative analysis, b) profiles project eligibles by when and extent to which they access family planning services or not, c) compares project eligibles' use of family planning services to the non-users, d) number of subsequent pregnancies, interpregnancy interval, and birth status by payer of second delivery, e) extent to which projected project savings were achieved, f) estimate of the overall cost-benefit of the project, g) results of the hypotheses tests, h) analysis of results by key demographic groups, and i) generalizability of findings to other states.

The Center will convene an advisory group to review the data specifications and provide overall guidance to the evaluation.

**HYPOTHESES**

The hypotheses described in Florida’s family planning waiver application have been revised in response to the concerns raised by the Health Care Financing Administration (HCFA). The revised hypotheses are:

- |              |  |
|--------------|--|
| Hypothesis 1 | The demonstration waiver will result in an increase in the annual proportion of women giving birth under Medicaid who access Medicaid-paid family planning services in Florida.  |
| Hypothesis 2 | The proportion of women in the target population who experience repeat Medicaid deliveries within two years will decline.  |
| Hypothesis 3 | Women accessing family planning services under the waiver will have a lower percentage of repeat deliveries than those who are eligible for services under the waiver but who do not access services.  |
| Hypothesis 4 | The waiver will result in a decrease in annual expenditures for the costs associated with pre-natal care, delivery, newborn and first year infant care expenditures for repeat Medicaid-deliveries.  |
| Hypothesis 5 | Savings under the waiver will exceed the cost of services provided.  |
| Hypothesis 6 | The waiver will result in fewer negative birth outcomes (percent low birth-weight, percent very low birth weight, pre-term delivery rate, neonatal mortality rate, post-neonatal mortality and infant mortality) for women who do experience a repeat birth. |
| Hypothesis 7 | The percentage of repeat Medicaid births to teens will decline under the waiver.   |

**DATA SOURCES**

Quantitative Analysis

Information for the evaluation will primarily come from administrative data that is collected by the Agency that is then merged with vital statistic information by the Center. Data will be examined from 1991 through the end of the project for those items for which the Center has already collected data. Data are available on Medicaid eligibility status, birth outcomes, previous births and interpregnancy interval. A copy of the Center’s last report on Medicaid data is attached to provide baseline data for the entire Medicaid population. In addition to these data, Medicaid will provide claims data related to pregnancy, delivery, family planning, and newborn and first year infant data to the Center for the year prior to the project and for each subsequent project year. These data will be merged with the existing data base for evaluation purposes.

All reports will be by the total Medicaid population served, eligibility category, provider type for initial pregnancy, use of family planning services and age. Age groups will be less than 19; 19 to 34 and greater than 34.

Profiles of eligibles will be completed. Users of post-partum family planning services will be compared to non-users to determine if there are any differences in terms of age, race, or location. Users will be examined by time between delivery and first family planning visit, extent of family planning participation, type of family planning chosen and cost of services provided.

These data will also be the primary source for testing project hypotheses. A complete description of how the data will be analyzed to test each hypothesis is discussed in the next section.

Qualitative Analyses

Several qualitative analyses will be conducted to assist in ensuring that the project is implemented as intended. These analyses are as follows:

- 1. In-depth interviews with a small sample of eligible recipients

During the first year of the project in-depth interviews will be conducted with approximately 100 individuals eligible under the waiver. Approximately half of those interviewed will have accessed services and half will have not. Interviews will be held in at least two districts. Respondents will be selected as if they were to participate in a focus group. Eligibles will be selected to ensure a diversity of age groups, and input from minorities and those for whom the primary language is Spanish.

In-depth interviews were selected over focus groups as it was felt that issues to be covered were too sensitive for people to be open in a focus group. Interviews will provide information to help design the satisfaction survey and cover:

- knowledge of the program's availability,
- attitude toward family planning,
- attitude toward Medicaid service providers,
- reasons for accessing or not accessing services,
- appropriateness of outreach materials, and
- any barriers to services.

## 2. Client survey

During the second year of the project a random sample of eligibles under the waiver will be contacted by telephone to determine their knowledge, access, and satisfaction with services. At a minimum, 460 surveys will be conducted. The survey sample will be accurate at plus or minus 5 percent at the 95% confidence level. A minimum response rate of 50 percent will be achieved.

The sample will be randomly selected **from** the file of those eligible for family planning services under the waiver. After the sample is selected, the Agency will obtain and provide to the Center the most current address and phone number for the recipient from the Medicaid eligibility file. If there is no telephone number listed or if one of the first two attempts to reach the recipient by phone determine that the number is not valid and information cannot provide an updated telephone number, a written survey will be mailed to the recipient. Recipients who complete the survey will receive **an** incentive to complete the survey. Incentives may be **up** to \$5 in cash or coupons for free diapers or other goods. A minimum of four attempts will be made to contact recipients by telephone at various times of the day before the person **is** determined to be unreachable. Those sent a mail survey will be sent a reminder survey within 30 days, if they have not responded, provided the mail was not returned as undeliverable.

## 3. Focus groups with eligible recipients who become pregnant

During the third year of the project a minimum of three focus groups will be held with individuals eligible for extended family planning services. Participants will include those who accessed family planning services and those who did not. Focus groups will be held in at least two districts. The focus groups will be designed to ensure appropriate input **from** racial minorities and those for whom the primary language is Spanish. The primary purpose of the focus groups will be to determine any barriers experienced with access to services, including understanding of program availability.

Focus groups will consist of 8 to 12 recipients. Groups will be moderated by a trained professional and held in facilities designed for focus groups. Recipients will be provided incentive to participate. All sessions will be recorded and possibly video taped.

#### **4. Key informant survey**

In the fourth year of the project a key informant survey will be mailed to a sample of providers of family planning services, advocates, Healthy Start coordinators, physicians providing delivery and post-natal services under Medicaid, workers in Florida's welfare reform program (**WAGES**) and members of local **WAGES** boards. The purpose of this survey is to obtain their assessment of:

- the extent to which the project was implemented as designed,
- implementation problems,
- service accessibility,
- service quality, and
- recommended changes.

### **PROPOSED METHODOLOGY FOR TESTING THE HYPOTHESES**

**Hypothesis 1**      The demonstration waiver will result in an increase in the annual proportion of women giving birth under Medicaid who access Medicaid-paid family planning services in Florida.

The Medicaid program will provide claims data to the Center on all women giving birth in the year prior to the waiver and for each year of the waiver. This information will be added to the data the Center already obtains on eligibility for Medicaid, which is merged with birth certificate data. The claims information will include data on family planning services provided, family planning supplies and tests. A person will be considered to have accessed a family planning service if they had a paid claim for a family planning service, supplies, or tests anytime during the year following delivery. Those having a tubal ligation during the delivery will be excluded from the analysis.

For the year prior to the waiver, the center will calculate the percentage of Medicaid women who lost their eligibility for Medicaid within one to three months from delivery who accessed family planning services in the year after delivery. The rate will also be calculated for those remaining Medicaid eligible. After implementation of the waiver, the rates will also be reported by:

- those eligible for extended family planning benefits through the waiver and regular Medicaid,
- eligibility category at the time of birth,

- service delivery program at birth (i.e., Health Maintenance Organization or MediPass),
- age group of the recipient, and
- region.

When sufficient time has elapsed, rates will also be calculated for those who accessed a family service within two years of delivery.

For those receiving a service, the average length of time between delivery and the first claim for a family planning service will be determined for each group. Data will also be presented by the percent accessing family planning services by each month after delivery. Rates of access will also be calculated by the percent that receive family planning services beyond an initial visit. Rates of continued access will be examined by family planning provider type (county health department, family planning clinic, rural health clinic, and private provider),

The same methodology will be followed for each subsequent year of the demonstration. Data will be collected on all Medicaid groups as it is anticipated that outreach for the waiver may have the side effect of increasing participation for other groups as well.

In addition, the characteristics of those that access family planning services will be compared to those who do not to determine if there are significant differences in penetration by age, race or gender. Users of post-partum family planning services will be compared to non-users to determine if there are any differences in terms of age, race, or location. Users will be examined by time between delivery and first family planning visit, extent of family planning participation, type of family planning chosen and cost of services provided.

**Hypothesis 2**            The proportion of women in the target population who experience repeat Medicaid deliveries within two years will decline.

In the first year of the project, the Center will calculate baseline data from the merged birth certificate and Medicaid eligibility file. For each year, starting in 1991, the Center will first determine the number of women who had a Medicaid paid birth in that year who lost eligibility for Medicaid within two to three months of the birth (target population). These women will be tracked against the merged birth certificate and Medicaid eligibility file for two years to determine if they had a subsequent birth. Rates of repeat births will be reported for each year's cohort for one and two years after birth. Rates will be reported for the target population as well as for those Medicaid women who do not lose their eligibility immediately after the baby's birth. Rates will also be calculated for the following sub-groups: eligibility categories at birth (AFDC or SOBRA), race, and age.

Each year, an additional year of data will be provided. Data on the waiver population will start to be available during the third year of the evaluation. Characteristics of those having a subsequent birth will be compared to those that do not for the target population.

**Hypothesis 3**      Women accessing family planning services under the waiver will have a lower percentage of repeat deliveries than those who are eligible for services under the waiver and who do not access services.

Starting in the third year of the waiver, rates of subsequent deliveries within one and two years of initial eligibility will be calculated for those accessing family planning services under the waiver and those that do not. Rates will be presented by age cohort. Fertility varies by age, and utilization of family planning services may also vary by age.

To complete the analysis, data from the claims file as described under hypothesis 1 will be merged with the data on subsequent births for the waiver population. Rates will also be presented by the two definitions of access described in hypothesis 1.

A multivariate model (logistic) is currently being developed to predict adverse pregnancy outcomes using the merged data set created by USF. For the final report, it is anticipated that variables used for this model will be incorporated into a multivariate analysis to determine which factors are related to a woman in the waiver having a subsequent birth. Use of family planning services will also be included as an independent variable. Analysis will be limited to women for whom two years of post-partum data are available.

**Hypothesis 4**      The waiver will result in a decrease in annual expenditures for the costs associated with pre-natal care, delivery, newborn and first year infant care expenditures for repeat Medicaid-deliveries.

Medicaid will provide the Center with all claims data related to pre-natal care, delivery, newborn and first year infant care for the year prior to the waiver and for each year of the waiver. In the first year of the project, the Center will calculate the following pre-waiver costs:

- total expenditures for the identified services
- total expenditures for the identified services by eligibility group
- total expenditures for the identified services for births in that year which represented a repeat Medicaid birth. To be considered a repeat Medicaid birth, the women must have had a Medicaid-financed delivery in the prior two years.
- total expenditures for the identified services for births in that year which represent a repeat Medicaid birth to a women who had lost eligibility within two-three months of the previous delivery (target women).

Each subsequent year the same information will be calculated. In addition, expenditures for the identified services will be calculated for those women served by the waiver who have a subsequent birth during the year. By the third year of the waiver, it is not anticipated that there would be any expenditures for the fourth category.

To determine if subsequent year total expenditures for repeat Medicaid births are significantly lower under the waiver, expenditures will be adjusted for cost increases.



Two different methods will be used to adjust costs. One method will use the health care cost index. The other will adjust expenditures based on the average Medicaid annual cost increase per recipient for the identified services.

The probability of having a repeat birth is related to size of caseloads in the previous two years. Data indicate that the number of Medicaid-paid births is declining. Thus, sensitivity analyses will be conducted to determine to what extent any decline in expenditures is due to declining caseloads unrelated to the waiver. For example, expenditures will be adjusted by the difference in size of caseload. The caseload two years prior to the baseline year's expenditure will be compared to the caseload two years prior to expenditures for the comparison year and the percentage difference used to adjust total expenditures.

**Hypothesis 5** Savings under the waiver will exceed the cost of services provided.

First, Medicaid costs of serving the waiver clients will be calculated from the claims history for each year. If a waiver client has a subsequent birth within two years, all Medicaid expenditures for pre-natal care, delivery, newborn and first year infant care expenditures related to that birth will be captured by the year in which they occur. The costs will be added to the cost of family planning services to obtain the cost of services provided.

Next, costs of services without the waiver will need to be determined. These will be obtained as follows:

1. The expenditures for pre-natal care, delivery, newborn and first year infant care expenditures in a year for waiver clients as determined above will be divided by the number of waiver clients with a subsequent delivery in the year to obtain an average cost per delivery for the year.
2. The number of eligibles who would have had a pregnancy in the year without the waiver will be calculated. This will be determined by multiplying the rate of repeat births found for the target population in the year prior to the waiver (using comparable time periods) to those eligible under the waiver.
3. This rate would be multiplied by the average cost found in 1 to determine costs without the waiver.

The amount of savings would then be the difference between costs of services in the waiver and costs as calculated above.

As a check on these calculations, total expenditures for pre-natal care, delivery, newborn and first year infant care expenditures to target women in the year prior to the waiver will be compared to total expenditures in the third year and subsequent years of expenditures

for waiver eligibles. Expenditures would be adjusted for increases in cost and changes in caseload as discussed in hypothesis 4.

**Hypothesis 6**            The waiver will result in fewer negative birth outcomes (percent low birth-weight, percent very low birth weight, pre-term delivery rate, neonatal mortality rate, post-neonatal mortality and infant mortality) for women who do experience a repeat birth.

Baseline data will be calculated in the first year of the project. The incidence and rate of negative outcomes for repeat births for the target population (described in Hypothesis 1) will be calculated for each year's cohort starting with the 1991 cohort. The rate will be the incidence of each negative event over the two-year tracking period divided total number in the cohort. Rates will be similarly calculated for additional years and the waiver eligibles, as data become available.

The rate of each negative outcome will also be reported for repeat Medicaid deliveries in each year. Characteristics of those individuals with subsequent low birth weight babies will be compared to individuals with normal birth weight babies.

For the final report, the multivariate model developed to predict adverse outcomes will be applied to data for the waiver population. Access to family planning services will be included as an independent variable.

**Hypothesis 7**            The percentage of repeat Medicaid births to teens will decline under the waiver.

During the first year of the evaluation, baseline data on the rate of repeat Medicaid births to teens will be calculated starting with 1993. A Medicaid birth to a teen will be considered a repeat birth if the teen gave birth within the previous two years according to the merged birth certificate and Medicaid eligibility file. Teens for this analysis will be anyone giving birth who is age **18** or younger at the time of the birth. Each year an additional year will be calculated. Overall rates will be examined as it is hypothesized that the outreach efforts for the waiver will result in more teens accessing family planning services.

To determine if the waiver is responsible in part for any decrease in repeat Medicaid births to teens the following analysis will be conducted for the final report. The rate of participation in the waiver will be calculated for teens giving birth for each year of the waiver. Rates of repeat births to teens eligible for waiver services will be calculated over all and by whether the teen accessed family planning services. The percent of teens with a Medicaid birth who access family planning services within the year following birth will be calculated for each year of the waiver and for a year prior to the waiver. Teens with a repeat Medicaid birth will be compared to those without a repeat birth in terms of demographic characteristics.

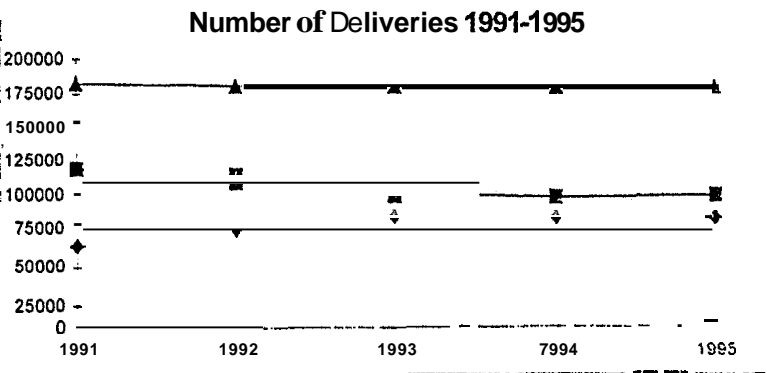
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There has been an improvement in the health status indicators among both the Medicaid and non-Medicaid funded pregnant women and infants in Florida over the period from 1991 to 1995. For many indicators, the degree of improvement for Medicaid recipients has been greater than for the non-Medicaid population. **Among** the important findings are:

- the number of Medicaid funded deliveries increased as expected with increases in Medicaid eligibility;
- the infant mortality rate declined for both Medicaid and non-Medicaid deliveries, with the greatest decrease appearing within the Medicaid population;
- the average number of months between pregnancies increased for Medicaid recipients by about 20%, compared to a 6% increase among non-Medicaid recipients;
- the percentages of low birthweight (lbw) deliveries funded by Medicaid declined slightly, while the non-Medicaid funded lbw deliveries decreased from 1991 to 1992 then increased slightly each year thereafter;
- rates for Medicaid funded deliveries to teens continually declined from 1991 to 1995;
- the percentage of cesarean deliveries declined statewide between 1991 and 1995, but not among Medicaid recipients.

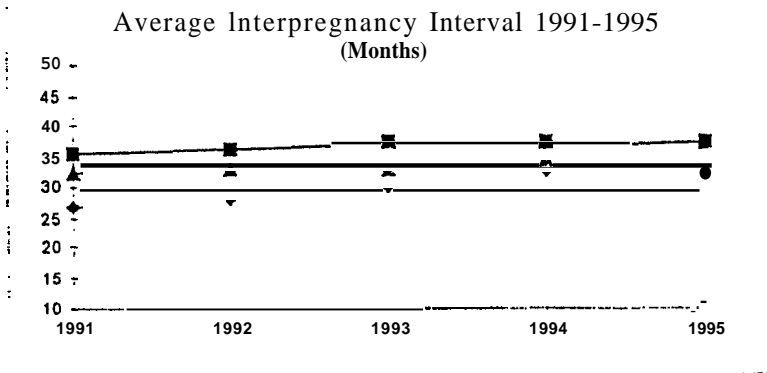
	1991	1992	1993	1994	1995
Medicaid	65978	73453	83007	84034	79969
Non-Medicaid	118107	108778	100395	97054	99208
Total Statewide	184085	182231	183402	181088	179177

Even though Florida experienced a decrease of almost 5,000 deliveries from 1991 to 1995, the percentage of births to Medicaid recipients increased during this time period, in part reflecting changes in the Medicaid eligibility requirements. Thirty-five percent of **all** deliveries were funded by Medicaid in 1991, compared to **45%** in 1995.



	1991*	1992"	1993'	1994'	1995'
Medicaid	26.73	28.04	30.06	30.75	32.00
Non-Medicaid	35.53	36.15	36.79	37.23	37.62
Total Statewide	32.32	32.82	33.73	34.21	35.08

The average number of months between pregnancies expanded for Medicaid clients by about **20%** between 1991 and 1995. While non-Medicaid funded women had interpregnancy intervals which were significantly ( $p \leq 0.01$ ) greater than those funded by Medicaid, the average length between pregnancies increased by only 6% during this same time period.

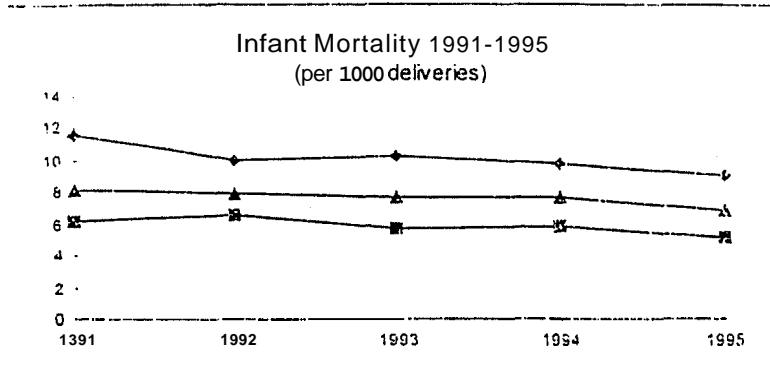


**Please Note:**  
\*  $p \leq 0.01$  Medicaid vs Non-Medicaid in the indicated year  
+  $p \leq 0.05$  Medicaid vs Non-Medicaid in the indicated year  
‡ any indicator with  $n \leq 5$  has been omitted

◆ Medicaid  
■ Non-Medicaid  
A Total Statewide

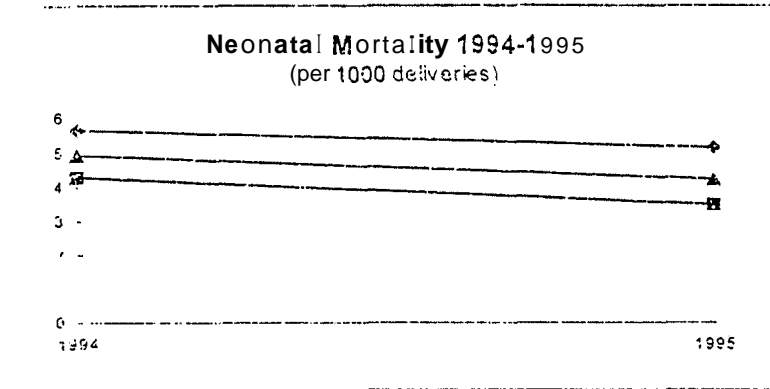
These statistics represent deliveries to women identifiable by Medicaid status. For this reason, data representing women with missing identifier (social security number) and multiple births other than the initial delivery are omitted.

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	1991*	1992*	1993*	1994*	1995*
Medicaid	761	732	847	819	716
Medicaid %	11.53	9.97	10.20	9.75	8.95
Non-Medicaid	731	715	571	570	509
Non-Medicaid %	6.19	6.57	5.69	5.87	5.13
Total Statewide	1492	1447	1418	1389	1225
Total Statewide %	8.10	7.94	7.73	7.67	6.84

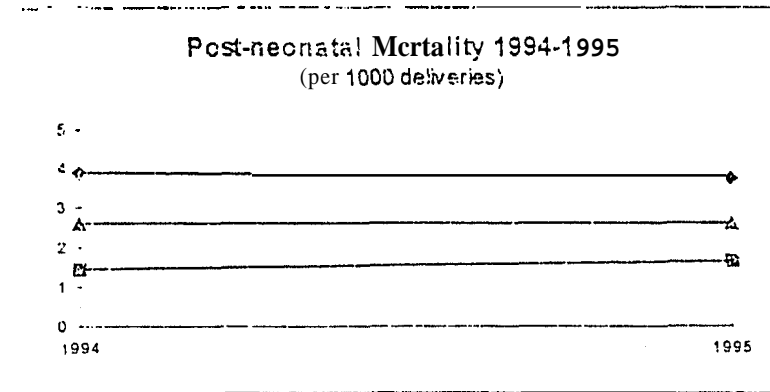
Infant mortality rates were lower in 1995 than in 1991 for both the study populations. The percent decrease was greater for the Medicaid population at 22.4%, than for the non-Medicaid population at 17.1%.



	1991	1992	1993	1994*	1995*
Medicaid	N/A	N/A	N/A	477	411
Medicaid Rate	N/A	N/A	N/A	5.68	5.14
Non-Medicaid	N/A	N/A	N/A	417	346
Non-Medicaid Rate	N/A	N/A	N/A	4.33	2.42
Total Statewide	N/A	N/A	N/A	894	757
Total Statewide Rate	N/A	N/A	N/A	4.94	4.22

Data not available 1991-1993. Neonatal and Post-neonatal Mortality do not equal the sum of Infant Mortality due to missing data.

There was a decrease between 1994 and 1995 for both Medicaid and non-Medicaid populations, with the non-Medicaid population rate decreasing more than that of the Medicaid population.



	1991	1992	1993	1994*	1995*
Medicaid	N/A	N/A	N/A	327	301
Medicaid Rate	N/A	N/A	N/A	3.89	3.76
Non-Medicaid	N/A	N/A	N/A	143	162
Non-Medicaid Rate	N/A	N/A	N/A	1.47	1.63
Total Statewide	N/A	N/A	N/A	470	463
Total Statewide Rate	N/A	N/A	N/A	2.60	2.58

Data not available 1991-1993. Neonatal and Post-neonatal Mortality do not equal the sum of Infant Mortality due to missing data.

Although the post-neonatal mortality rate decreased from 1994 to 1995 for the Medicaid funded population, the rate for the non-Medicaid population increased.

Please note:  
♦ Medicaid \* p ≤ 0.01 Medicaid vs Non-Medicaid in the indicated year  
■ Non-Medicaid + p ≤ 0.05 Medicaid vs Non-Medicaid in the indicated year  
▲ Total Statewide ‡ any indicator with n ≤ 5 has been omitted

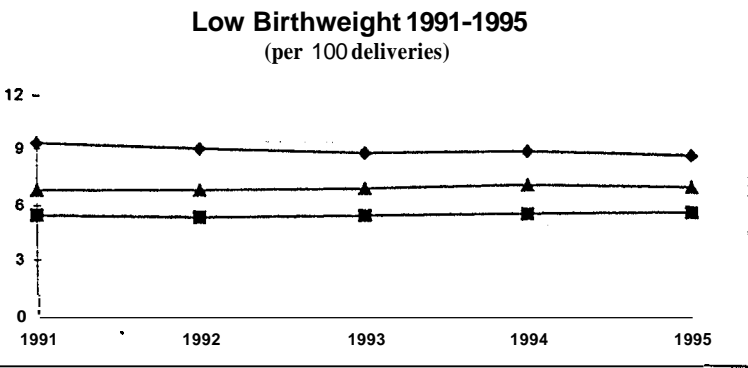
These statistics represent deliveries to women identifiable by Medicaid status. For this reason, data representing women with missing identifier (social security number) and multiple births other than the initial delivery are omitted.

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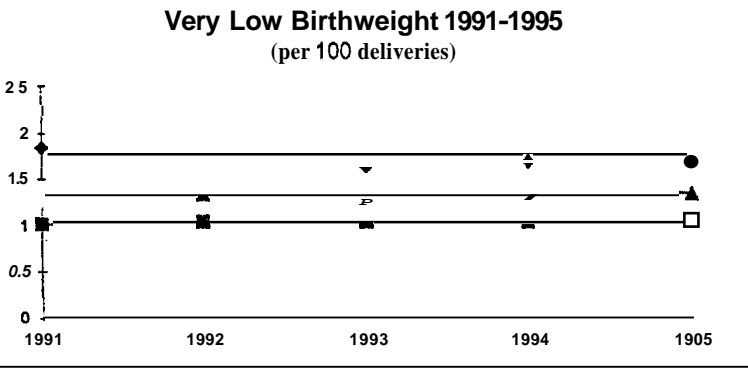
	1991'	1992'	1993'	1994'	1995'
Medicaid	6156	6575	7239	7471	6950
Medicaid %	9.33	8.95	8.72	8.89	8.69
Non-Medicaid	6416	5844	5447	5381	5636
Non-Medicaid %	5.43	5.37	5.43	5.54	5.68
Total Statewide	12572	12419	12686	12852	12586
Total Statewide %	6.83	6.81	6.92	7.10	7.02

The percentage of lbw deliveries for Medicaid recipients declined slightly during each of the five years examined. Medicaid recipients had significantly more lbw infants than non-Medicaid recipients. For non-Medicaid recipients, the percentage of lbw babies began increasing slightly in 1993.

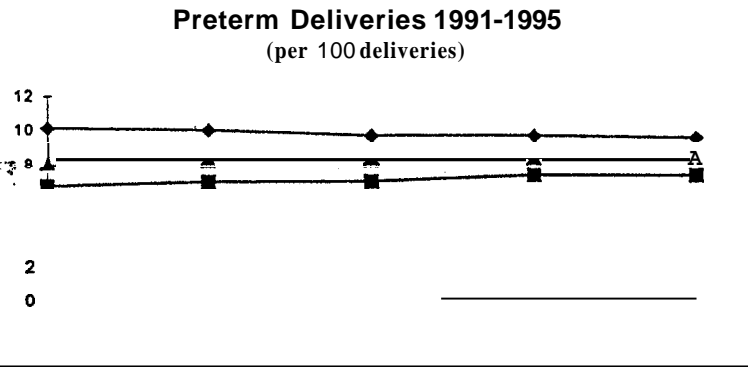


	1991*	1992"	1993*	1994*	1995'
Medicaid	1213	1282	1361	1404	1333
Medicaid %	1.84	1.75	1.64	1.67	1.67
Non-Medicaid	1196	1133	1027	1029	1032
Non-Medicaid %	1.01	1.04	1.02	1.06	1.04
Total Statewide	2409	2415	2368	2433	2365
Total Statewide %	1.31	1.33	1.30	1.34	1.32

Statewide, the percentage of babies born at vlbw changed little over this time period. Although the percentages of vlbw deliveries improved slightly for Medicaid recipients, the actual number of these Medicaid-funded deliveries increased, reflecting the increase of Medicaid supported deliveries since 1991.



	1991'	1992'	1993'	1994'	1995'
Medicaid	6722	7394	8066	8137	7655
Medicaid %	10.19	10.07	9.72	9.68	9.57
Non-Medicaid	7990	7548	6981	7071	7313
Non-Medicaid %	6.77	6.94	6.95	7.29	7.37
Total Statewide	14712	14942	15047	15208	14968
Total Statewide %	7.99	8.20	8.20	8.40	8.35



the five years, by a total of 6.1%. By contrast, among non-Medicaid funded deliveries, there was an increase in each of the five years, with 1995 being of the pairwise years were statistically significant.

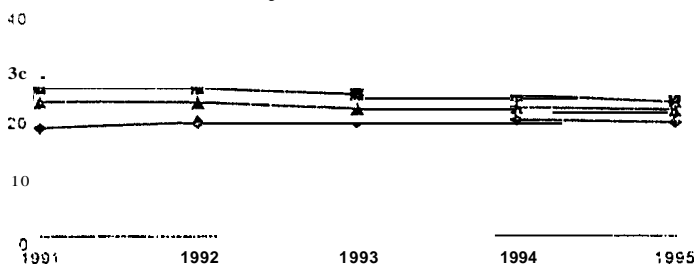
Please Note:  
\* p ≤ 0.01 Medicaid vs Non-Medicaid in the indicated year  
+ p ≤ 0.05 Medicaid vs Non-Medicaid in the indicated year  
‡ any indicator with n ≤ 5 has been omitted

◆ Medicaid  
■ Non-Medicaid  
▲ Total Statewide

These statistics represent deliveries to women identifiable by Medicaid status. For this reason, data representing women with missing identifier (social security number) and multiple births other than the initial delivery are omitted.

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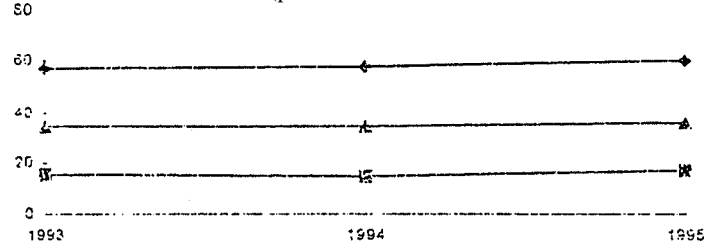
Cesarean Deliveries 1991-1995  
(per 100 deliveries)



	1991*	1992'	1993'	1994*	1995'
Medicaid	12713	14856	16814	16739	15630
Medicaid %	19.27	20.23	20.26	19.92	19.55
Non-Medicaid	31226	28680	25261	23350	23108
Non-Medicaid %	26.44	26.37	25.16	24.05	23.29
Total Statewide	43939	43536	42075	40089	38738
Total Statewide %	23.27	23.89	22.94	22.14	21.62

The percentage of cesarean births to Medicaid recipients increased slightly from 1991(19.3%) to 1993 (20.3%), then began a slight decrease to 19.6% in 1995. For Non-Medicaid recipients, there has been a steady decrease during each of the five years (from 26.4% in 1991 to 23.3% in 1995).

Healthy Start Prenatal Screen:  
Total Screened 1993-1995  
(per 100 deliveries)

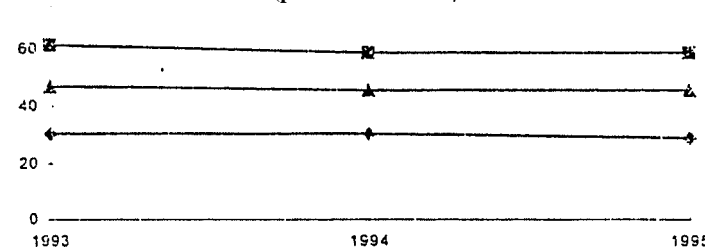


	1991	1992	1993'	1994'	1995*
Medicaid	N/A	N/A	47697	36697	48050
Medicaid %	N/A	N/A	57.46	57.95	60.09
Non-Medicaid	N/A	N/A	15232	13889	16768
Non-Medicaid %	N/A	N/A	15.17	14.31	16.90
Total Statewide	N/A	N/A	62929	62586	64818
Total Statewide %	N/A	N/A	34.31	34.56	36.18

Screen not available 1991. Program began April 1992.

Fifty-seven percent of all Medicaid recipients received the HS Prenatal Screen in 1993, the first full year of screening, increasing to over 60% in 1995. About 15% of all non-Medicaid recipients were screened in 1993, compared to 17% in 1995.

Healthy Start Prenatal Screen:  
Not Offered 1993-1995  
(per 100 deliveries)



	1991	1992	1993*	1994'	1995*
Medicaid	N/A	N/A	25051	25472	23365
Medicaid %	N/A	N/A	30.18	30.31	29.24
Non-Medicaid	N/A	N/A	61390	57052	57956
Non-Medicaid %	N/A	N/A	51.15	58.78	58.42
Total Statewide	N/A	N/A	86441	82524	81341
Total Statewide %	N/A	N/A	47.13	45.57	45.40

Screen not available 1991. Program began April 1992.

Of the Medicaid recipients who delivered in 1993, 30% were not offered the HS Prenatal Screen, a percentage which remained relatively constant for the following two years. Ninety-five percent of the Non-Medicaid recipients who delivered in 1993 were not offered the Screen, compared to 58% in 1995.

Please Note:

- ♦ Medicaid \*  $p \leq 0.01$  Medicaid vs Non-Medicaid in the indicated year
- Non-Medicaid +  $p \leq 0.05$  Medicaid vs Non-Medicaid in the indicated year
- A Total Statewide ‡ any indicator with  $n \leq 5$  has been omitted

These statistics represent deliveries to women identifiable by Medicaid status. For this reason, data representing women with missing identifier (social security number) and multiple births other than the initial delivery are omitted.

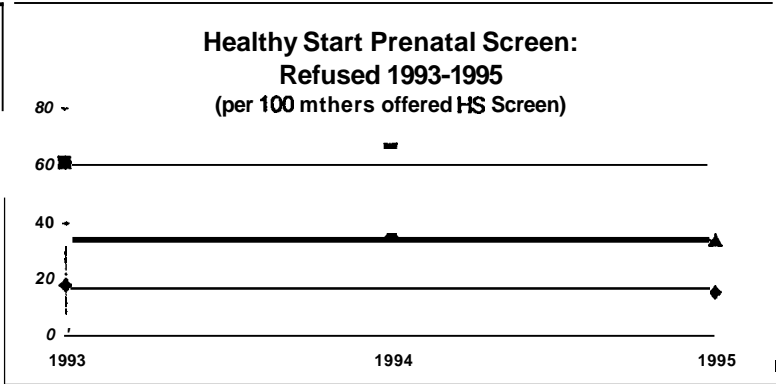
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	1991	1992	1993'	1994*	1995*
Medicaid	N/A	N/A	10261	9869	8552
Medicaid %	N/A	N/A	17.70	16.85	15.11
Non-Medicaid	N/A	N/A	23775	26114	24305
Non-Medicaid %	N/A	N/A	60.95	65.28	58.92
Total Statewide	N/A	N/A	34036	35983	32857
Total Statewide %	N/A	N/A	35.10	36.51	33.58

Screen not available 1991. Program began April 1992.

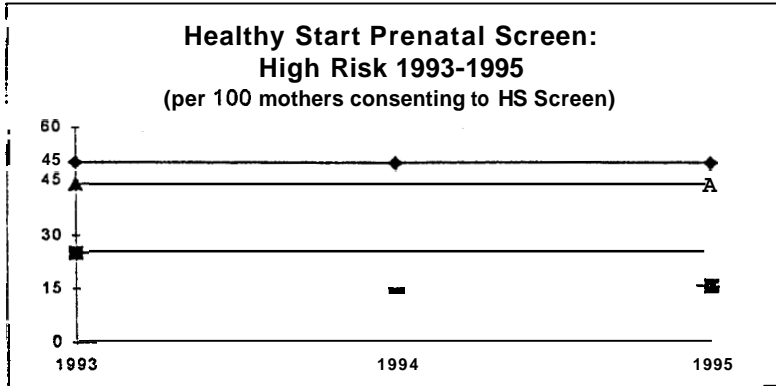
Eighteen percent of the Medicaid recipients who were offered the HS Prenatal Screen in 1993 refused it, compared to 15% who refused in 1995. For non-Medicaid recipients, the percentage of those who refused the screen when it was offered decreased from 61% in 1993 to 59% in 1995.



	1991	1992	1993"	1994"	1995"
Medicaid	N/A	N/A	23930	24003	23882
Medicaid %	N/A	N/A	50.17	49.29	49.72
Non-Medicaid	N/A	N/A	3732	3683	4297
Non-Medicaid %	N/A	N/A	24.50	26.52	25.36
Total Statewide	N/A	N/A	27662	27686	28179
Total Statewide %	N/A	N/A	43.96	44.24	43.37

Screen not available 1991. Program began April 1992.

The percentages of mothers whose HS Prenatal Screen indicated that they were at high risk decreased slightly from 1993 to 1995, a pattern which occurred in both the screened Medicaid and non-Medicaid populations.



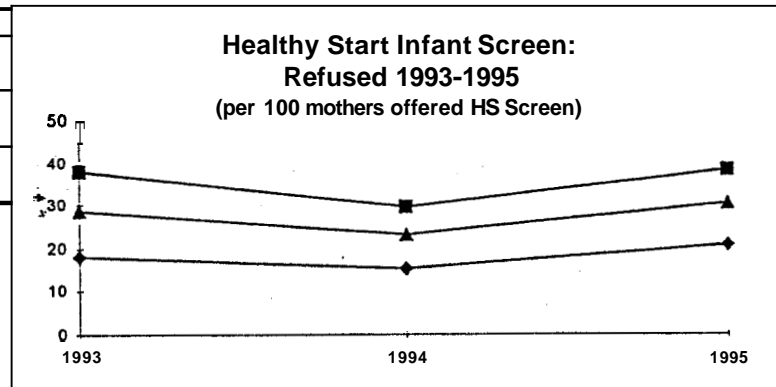
	1991	1992	1993*	1994*	1995'
Medicaid	N/A	N/A	13926	12026	15451
Medicaid %	N/A	N/A	18.18	15.20	21.00
Non-Medicaid	N/A	N/A	33910	27080	35900
Non-Medicaid %	N/A	N/A	38.00	29.68	38.33
Total Statewide	N/A	N/A	47836	39106	51351
Total Statewide %	N/A	N/A	28.85	22.96	30.70

Screen not available 1991-1992.

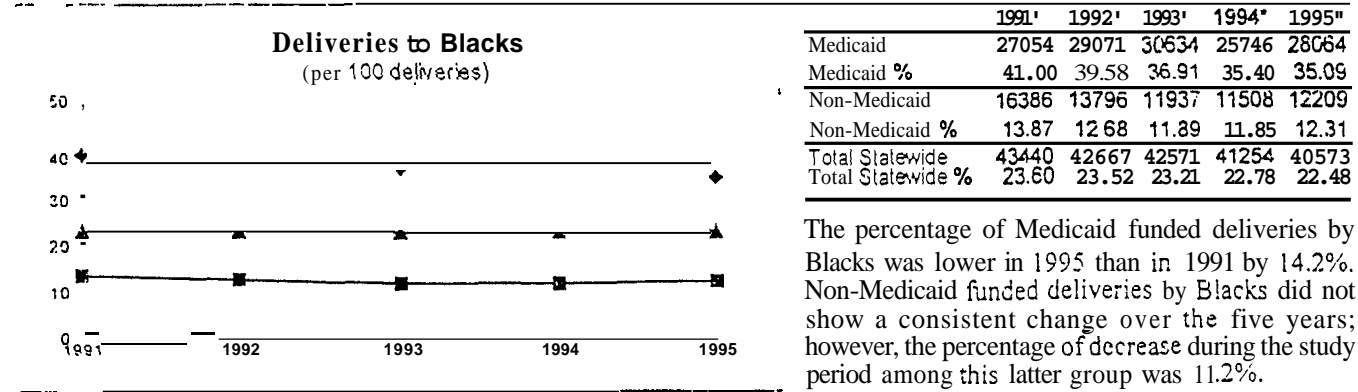
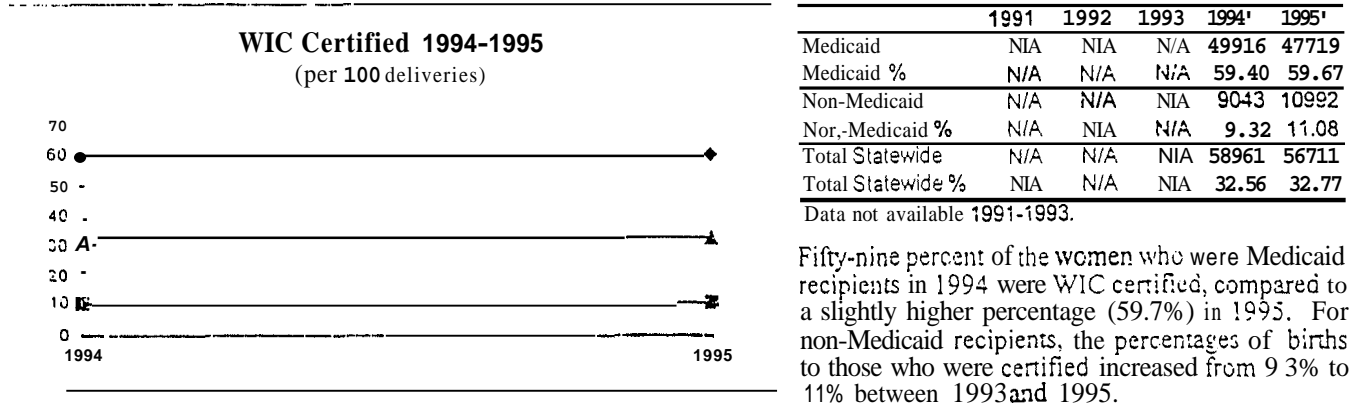
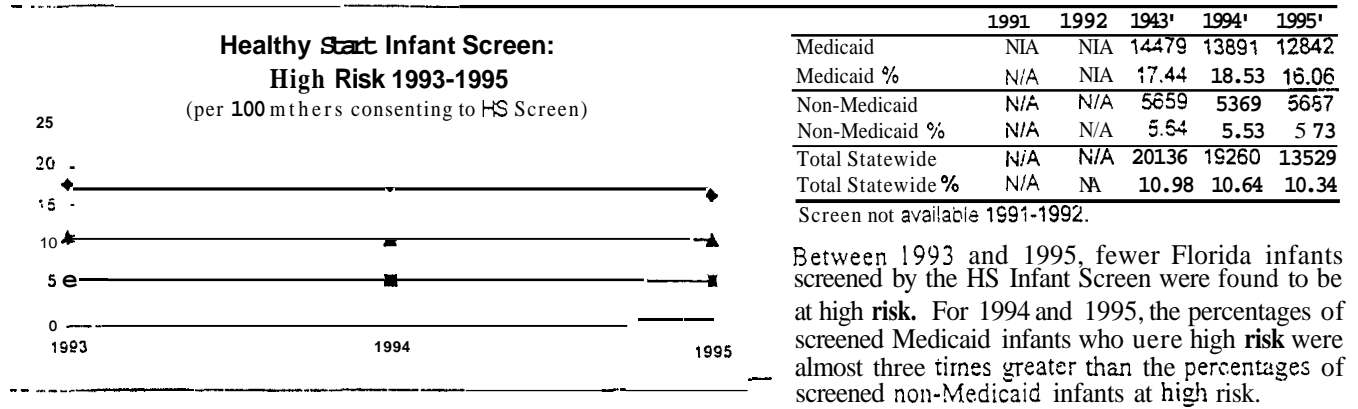
Eighteen percent of the Medicaid recipients who had delivered in 1993 refused the HS Infant Screen, increasing to 21% in 1995. The refusal rate of mothers whose deliveries were not supported by Medicaid was 38% in 1993, decreasing to 30% in 1994, and increasing to 38% in 1995.

Please Note:

- p ≤ 0.01 Medicaid vs Non-Medicaid in the indicated year
- + p ≤ 0.05 Medicaid vs Non-Medicaid in the indicated year
- ‡ any indicator with n ≤ 5 has been omitted



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Please Note:

◆ Medicaid

■ Non-Medicaid

A Total Statewide

\*

+

‡

p ≤ 0.01 Medicaid vs Non-Medicaid in the indicated year

p ≤ 0.05 Medicaid vs Non-Medicaid in the indicated year

any indicator with n ≤ 5 has been omitted

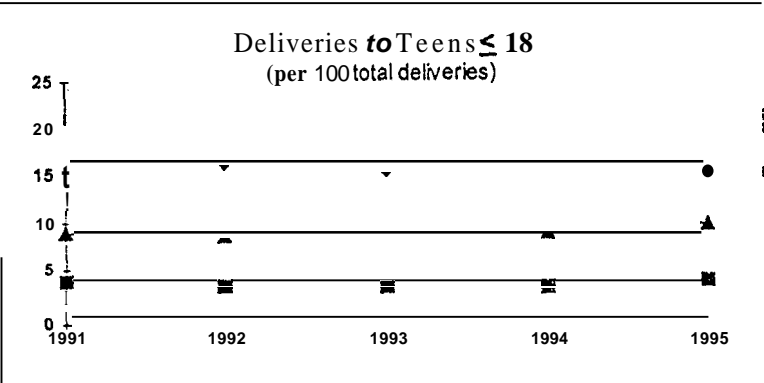
These statistics represent deliveries to women identifiable by Medicaid status. For this reason, data representing women with missing identifier (social security number) and multiple births other than the initial delivery are omitted.



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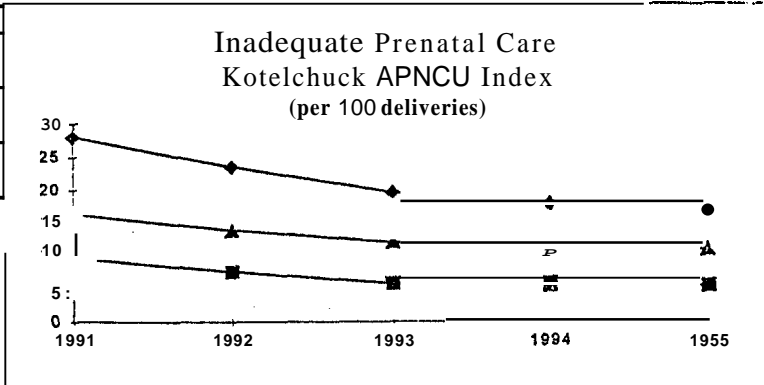
	1991*	1992*	1993*	1994*	1995*
Medicaid	11776	12122	13067	13292	12426
Medicaid %	17.85	16.50	15.74	15.82	15.54
Non-Medicaid	4405	3671	3039	3187	4133
Non-Medicaid %	3.73	3.37	3.03	3.28	4.17
Total Statewide	16181	15793	16106	16479	16559
Total Statewide %	8.79	8.67	8.78	9.10	9.24

There was a **2.3%** decrease in the number of Medicaid-funded deliveries to teens from 1991 to 1995. The percentage of births to teens who were non-Medicaid recipients decreased from **3.7%** in 1991 to **3%** in 1993, but rose to **4.2%** by 1995.



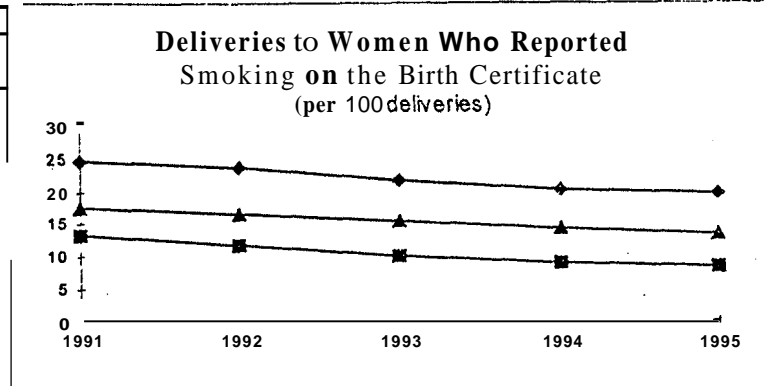
	1991*	1992*	1993*	1994*	1995*
Medicaid	18502	17188	16236	14966	13235
Medicaid %	28.04	23.40	19.56	17.81	16.55
Non-Medicaid	11214	7917	5746	5176	5244
Non-Medicaid %	9.49	7.28	5.72	5.33	5.29
Total Statewide	29716	25105	21982	20142	18479
Total Statewide %	16.14	13.78	11.99	11.12	10.31

The percentage of deliveries to women with inadequate prenatal care, according to the Kotelchuck APNCU Index, decreased each year between 1991 and 1995 for both Medicaid and non-Medicaid funded populations, with a decrease between the two years of **41%** and **44%** respectively.



	1991*	1992*	1993*	1994*	1995*
Medicaid	16290	17540	18075	17049	15666
Medicaid %	24.69	23.88	21.78	20.29	19.59
Non-Medicaid	15755	12822	10265	8672	8142
Non-Medicaid %	13.34	11.79	10.22	8.94	8.21
Total Statewide	32045	30362	28340	25721	23808
Total Statewide %	17.41	16.66	15.45	14.20	13.29

Women reported less smoking during pregnancy, with the percentage of those supported by Medicaid reporting a significant decrease each year of the study period, for a total decrease of **20.7%**. Among the non-Medicaid group, there was a decrease from **13.3%** to **8.2%** during the same period, for a total difference of **38.5%**.



Please Note:  
\* p  $\leq$  0.01 Medicaid vs Non-Medicaid in the indicated year  
+ p  $\leq$  0.05 Medicaid vs Non-Medicaid in the indicated year  
‡ any indicator with n  $\leq$  5 has been omitted

◆ Medicaid  
■ Non-Medicaid  
▲ Total Statewide

These statistics represent deliveries to women identifiable by Medicaid status. For this reason, data representing women with missing identifier (social security number) and multiple births other than the initial delivery are not included.

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# Limitations of the Data

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Limitations of this report worthy of noting:

*Confidence in the Accuracy of the Data*

The data contained within this report is based on Medicaid eligibility files, Medicaid **HMO** enrollment files, and MediPass enrollment files supplied by the Florida Agency for Health Care Administration (**AHCA**), as well as birth and death files supplied by Vital Statistics; Women, Infants and Children (WIC) Nutritional Supplement Program certification files supplied by the Florida WIC office; and Florida Healthy Start files. Although the files have been reviewed for reasonableness, the University of South Florida, Lawton and Rhea Chiles Center cannot be responsible for the accuracy of these files.

*Potential Discrepancies with Other Data Sets*

The statistics within this report represent deliveries to women identified by Medicaid status. As a result, data representing women with a missing identifier (social security number) and second and subsequent births of a multiple birth are omitted. For this reason, rates and percents found in this report will not match those seen in other reports using all births to Florida residents as the denominator.

*Interpretation of Trend Data*

For most indicators, Medicaid data is reported for 1991 through 1995. Trend data is useful for determining the magnitude and direction of change; interpretations of trends may be made with more confidence as the length of time for which data is available increases. When unexpected trends are discovered, it may be useful to review data which goes back for a longer period of time. Trends based on small numbers should be interpreted with a great deal of caution.

*Teen Births*

Teen Birth data reflects the load on the health care system and should not be interpreted as a change in the fertility pattern of adolescents.

*Healthy Start: Prenatal Screen Not Offered*

In cases where there was no record matched with a delivering mother's social security number or a combination of mother's county of residence, date of birth, and part of her first and last name, it was assumed that the Healthy Start Prenatal Screen was not offered.

*Neonatal and Post-neonatal Mortality*

Neonatal and Post-neonatal mortality rates were computed by matching death certificates with birth certificates. This was made possible by the 1994 innovation of posting the death certificate number on the birth certificate when the individual died in the first year of life. It is believed that these statistics are somewhat understated because neonatal and post-neonatal mortality do not add up to the number of infant deaths as computed by calculating the number of birth certificates with the death flag.

*Inadequate Prenatal Care Based on the Kotelchuck Adequacy of Prenatal Care Utilization (APNCU) Index*

Three relevant limitations to the APNCU Index are discussed here as they appear in *An Evaluation of the Kessner Adequacy of Prenatal Care Index and a Proposed Adequacy of Prenatal Care Utilization Index* (Kotelchuck, Milton. 1994 American Journal of Public Health. 84(9): 1414-1420).

- 1) The APNCU Index does not measure the adequacy of the content of prenatal care, rather the utilization of prenatal care.
- 2) The Index is only as accurate as the data (the birth certificate) used to calculate it; inaccuracies in birth certificate data, particularly for prenatal care and gestational age, have been well documented.
- 3) The APNCU Index does not adjust for the risk conditions of the mother, rather it is based on the AGOG recommendations for women with uncomplicated pregnancies. As a result, the APNCU Index produces a slightly conservative estimate of inadequate prenatal care utilization because it underestimates the true need for prenatal care.

**Methods for Maternal and Infant Health Status Indicators for Florida 1995:  
Statewide Report for Medicaid Managed Care  
DRAFT**

All analyses were completed using **SAS**, a proprietary statistical and data management program. Files were obtained from Vital Statistics for Florida births 1991 through 1995 and deaths 1991 through 1996. Data for births which met any of the following conditions were eliminated from the study: 1) out-of-state births (mother's residence not Florida); 2) second and subsequent births of a multiple birth (only the data for the first birth was retained); and 3) births with a missing identifier (social security number).

Births were matched to Healthy Start Infant Screen consents (supplied by the Florida Department of Health [DOH]) using the birth certificate number. Births were matched to Healthy ~~Start~~ Prenatal Screens according to the mother's social security number or, if that failed, by the mother's county of residence, the mother's date-of-birth, and the mother's first or last name. Women, Infants and Children Program (WIC) data, compiled by the Florida DOH, were matched according to an algorithm similar to that described above for the Healthy Start Prenatal Screens.

The date of conception was computed based on the date of last menses as indicated on the birth certificate if present; if not, the last menstrual period date from the Healthy Start screen was used. Otherwise, the conception date was based on the estimated gestational age as listed on the birth certificate. If none of the above indicators were available, conception was computed as 270 days prior to the birth date.

The data were then matched to the Agency for Health Care Administration (AHCA) Medicaid data files by the mother's social security number and divided into two categories: "Medicaid" or "Not Medicaid." Those women who were registered by Medicaid (as indicated by data provided by **AHCA**) during their period of pregnancy (date of last menses to delivery date) for 180 days or more **or** who were registered on the date of delivery were placed into the "Medicaid" category.

Those who were placed in the "Medicaid" category were then matched with the AHCA HMO enrollment files and MediPass enrollment files by the mother's Medicaid number, which **was** taken from the Medicaid eligibility file. They were then placed into **one** of three enrollment categories: "Medicaid HMO," "Medipass," or "fee-for-service." The qualification criteria for either "Medicaid HMO" or "Medipass" were consistent with the requirements for Medicaid registration: 180 days or more of enrollment during pregnancy or delivery while enrolled. Those who were not classified **as** either **as** "Medicaid HMO" or "MediPass" enrolled were then classified as fee-for-service by default.

The "Medicaid HMO Enrolled" category was also subdivided into two additional categories: 1) select Medicaid HMO and 2) all other Medicaid HMOs for each of the Medicaid HMOs operating in the State of Florida during 1995 (provider numbers were supplied by **AHCA**) . Medicaid HMOs with less than 15 deliveries during 1995 were eliminated from the study. The selected Medicaid HMO was then evaluated by its two components: 1) "High Exposure" (enrollment for 180 days or more) and 2) "Low Exposure" (enrollment for less than 180 days and delivered while enrolled).

The rate, percent, or average (as appropriate) for the maternal and infant health status indicators were then calculated for all the categories.

## Methods for Maternal and Infant Health Status Indicators for Florida 1991-1995

All analyses were completed using SAS, a proprietary statistical and data management program. Files were obtained from Vital Statistics for Florida births 1991 through 1995 and deaths 1991 through 1996. Data for births which met any of the following conditions were eliminated from the study: 1) out-of-state births (mother's residence not Florida); 2) second and subsequent births of a multiple birth (only the data for the first birth was retained); and 3) births with a missing identifier (social security number).

Births were matched to Healthy Start Infant Screen consents (supplied by the Florida Department of Health [DOH]) using the birth certificate number. Births were matched to Healthy Start Prenatal Screens according to the mother's social security number or, if that failed, by the mother's county of residence, the mother's date-of-birth, and the mother's first or last name. Women, Infants and Children Program (WIC) data, compiled by the Florida DOH, were matched according to an algorithm similar to that described above for the Healthy Start Prenatal Screens.

The date of conception was computed based on the date of last menses as indicated on the birth certificate if present; if not, the last menstrual period date from the Healthy Start screen was used. Otherwise, the conception date was based on the estimated gestational age as listed on the birth certificate. If none of the above indicators were available, conception was computed as 270 days prior to the birth date.

The data were then matched to the Agency for Health Care Administration (AHCA) Medicaid data files by the mother's social security number and divided into two categories: "Medicaid" or "Not Medicaid." Those women who were registered by Medicaid (as indicated by data provided by AHCA) during their period of pregnancy (date of last menses to delivery date) for 180 days or more or who were registered on the date of delivery were placed into the "Medicaid" category.

The rate, percent, or average (as appropriate) for the maternal and infant health status indicators were then calculated for all the categories on a state and county level. When available, five individual years (1991-1995) of data were reported for the state of Florida and the seven Florida counties (Broward, Dade, Duval, Hillsborough, Pinellas, Palm, and Orange counties) for which the Department of Health conducts annual County Health Department reviews. For the remaining 60 smaller counties, data were reported on a three year rolling-average basis (1991-1993, 1992-1994, 1993-1995) except for those indicators for which less than five years of data were available. Indicators with  $n \leq 5$  in a single year were not reported to protect confidentiality.

For counties in which five individual years of data were reported, significance ( $p \leq 0.05$  and  $p \leq 0.01$ ) was determined by comparing all indicator's pairwise years (1991 to 1992; 1992 to 1993; 1993 to 1994; and 1994 to 1995) as well as Medicaid indicators and non-Medicaid indicators using the Chi-square test (except for "Average Interpregnancy Interval" for which the Student t-test was used).

### Definitions of Payers

**Medicaid:** Recipient was found to be Medicaid registered during her period of pregnancy (date last menses to delivery date) for either 180 days or more **or** she was Medicaid registered on her date of delivery.

*High exposure:* Recipient was Medicaid registered for 180 days or more at any time during pregnancy (date last menses to delivery date). **Days** of enrollment are not required to be consecutive nor must the date of delivery be included.

*Low exposure:* Recipient Medicaid registered for less than 180 days and greater than zero days during pregnancy. Days of enrollment are not required to be consecutive but date of delivery must occur while enrolled.

**Medicaid HMO enrolled:** Recipient was found to be Medicaid HMO enrolled during her period of pregnancy (date last menses to delivery date) for either 180 days or more **or** she was Medicaid HMO enrolled on her date of delivery.

*High exposure:* Recipient was enrolled in a Medicaid **HMO** for 180 days or more at any time during pregnancy. Days of enrollment are not required to be consecutive nor must the date of delivery be included.

*Low exposure:* Recipient was enrolled in a Medicaid HMO for less ~~than~~ 180 days and greater than zero days during pregnancy. Days of enrollment are not required to be consecutive but date of delivery must occur while enrolled.

**MediPass enrolled:** Recipient was found to be MediPass enrolled during her period of pregnancy (date last menses to delivery date) for either 180 days or more **or** she was MediPass enrolled on her date of delivery.

*High exposure:* Recipient was enrolled in a MediPass for 180 days or more at any time during pregnancy. Days of enrollment are not required to be consecutive nor must the date of delivery be included.

*Low exposure:* Recipient ~~was~~ enrolled in a MediPass for less than 180 days and greater than zero days during pregnancy. Days of enrollment are not required to be consecutive but date of delivery must occur while enrolled.

**Fee-for-Service:** Recipient was Medicaid registered but did not qualify as either high or low exposure enrollees for either Medicaid HMO or MediPass.

Definitions of Indicators

**"Deliveries:** Total number of live births for the indicated year (1991 - 1995) to Florida/county residents for which the delivery could be matched with a social security number on the birth certificate; for multiple births, data was retained for the first infant born only.

**Interpregnancy Interval:** A continuous variable measured in months of the interval between the termination of the most recent previous pregnancy and last menstrual date of the current pregnancy as indicated on the birth certificate (Last Menstrual Date - Date of the Most Recent Termination or Date of Last Birth).

**Infant Mortality:** Infant reported deceased within first year of life as indicated by infant death flag on the birth Certificate.

$$\frac{\text{Number of infant deaths} \times 1,000}{\text{Number of (Medicaid, Non-Medicaid, or total as indicated) deliveries'}}$$

**Neonatal Mortality:** Deaths to individuals less than 28 days of age as indicated by infant death flag on the birth Certificate.

$$\frac{\text{Number of infant deaths age} < 28 \text{ days} \times 1,000}{\text{Number of (Medicaid, Non-Medicaid, or total as indicated) deliveries*}}$$

**Post-neonatal Mortality:** Deaths to individuals age 28 days through 364 days as indicated by infant death flag on the birth certificate.

$$\frac{\text{Number of infant deaths age} \geq 28 \text{ and} < 364 \text{ days} \times 1,000}{\text{Number of (Medicaid, Non-Medicaid, or total as indicated) deliveries*}}$$

**Low Birthweight:** Live births weighing less than 2500 grams as indicated on the birth certificate.

$$\frac{\text{Number of low weight live births} \times 100}{\text{Number of (Medicaid, Non-Medicaid, or total as indicated) deliveries*}}$$

**Very Low Birthweight:** Live births weighing less than 1500 grams as indicated on the birth certificate.

$$\frac{\text{Number of very low weight live births} \times 100}{\text{Number of (Medicaid, Non-Medicaid, or total as indicated) deliveries*}}$$

**Preterm Delivery:** Infants delivered between 20 and 37 weeks of gestation as calculated from date of last menses (LMP) of the mother, if present on the birth certificate, or from the clinical estimate of gestation if LMP missing from the birth certificate.

$$\frac{\text{Number of infants delivered } \geq 20 \text{ and } < 37 \text{ weeks of gestation} \times 100}{\text{Number of (Medicaid, Non-Medicaid, or total as indicated) deliveries}^*}$$

**Cesarean Birth:** Birth method reported as cesarean as indicated on the birth certificate.

$$\frac{\text{Number of cesarean deliveries} \times 100}{\text{Number of (Medicaid, Non-Medicaid, or total as indicated) deliveries}^*}$$

**Healthy Start Prenatal Screen:**

*Total Screened:* Mother screened with the Healthy Start Prenatal Screen; Screen matched with mother’s social security number or a combination of county of residence, date of birth, and part of her first and last name (Total Screened = Deliveries - [Refused + Not Offered]).

$$\frac{\text{Number of mothers screened with the Healthy Start Prenatal Screen} \times 100}{\text{Number of (Medicaid, Non-Medicaid, or total as indicated) deliveries}^*}$$

*Not Offered:* Mother presumably not offered Healthy Start Prenatal Screen since there was no record matched with a delivering mother’s social security number or a combination of county of residence, date of birth, and part of her first and last name (Not Offered = Deliveries - [Total Screened + Refused]).

$$\frac{\text{Number of mothers who were not offered the Healthy Start Prenatal Screen} \times 100}{\text{Number of (Medicaid, Non-Medicaid, or total as indicated) deliveries}^*}$$

*Refused:* Mother’s consent was not given according to the Healthy Start Prenatal Screening record and, therefore, risk status was not scored (Refused = Deliveries - [Total Screened + Not Offered]).

$$\frac{\text{Number of mothers who refused consent to the Healthy Start Prenatal Screen} \times 100}{\text{Number of mothers “offered” the Healthy Start Prenatal Screen}}$$

*High Risk:* Four or more points scored on the Healthy Start Prenatal Screen.

$$\frac{\text{Number of mothers whose Healthy Start Prenatal Screen scored high risk} \times 100}{\text{Number of mothers who consented to the Healthy Start Prenatal Screen}}$$



Healthy Start Infant Screen:

*Refused:* Mother’s consent was not given according to the Healthy Start Infant Screening record and, therefore, risk status was not scored.

$$\frac{\text{Number of mothers who refused consent to the Healthy Start Infant Screen} \times 100}{\text{Number of mothers “offered” the Healthy Start Infant Screen}}$$

*High Risk:* Four or more points scored on the Healthy Start Infant Screen.

$$\frac{\text{Number of infants whose Healthy Start Prenatal Screen scored high risk} \times 100}{\text{Number of mothers who consented to the Healthy Start Infant Screen}}$$

**WIC Certified:** Files were obtained from Women, Infants and Children Nutritional Supplement Program (WIC) for those women certified by WIC during the relevant period. Files were matched to birth records using social security number with date of delivery falling between WIC beginning and ending dates.

$$\frac{\text{Number of women who had a live birth and were WIC certified during pregnancy} \times 100}{\text{Number of (Medicaid, Non-Medicaid, or total as indicated) deliveries*}}$$

**Race of Mother:** Black as indicated on the birth certificate.

$$\frac{\text{Number of live births to black women} \times 100}{\text{Number of (Medicaid, Non-Medicaid, or total as indicated) deliveries*}}$$

**Teen Deliveries:** Births to adolescents ages 18 and under.

$$\frac{\text{Number of births to adolescents ages 18 and under} \times 100}{\text{Number of (Medicaid, Non-Medicaid, or total as indicated) deliveries*}}$$

**Inadequate Prenatal Care:** Proportion of women who received inadequate care according to the Adequacy of Prenatal Care Unit Index (Kotelchuck APNCU Index) algorithm. Prenatal care initiation begun in month 5 or later or less than 50 percent of prenatal care visits were received (adjusted for gestational age).

**Smoking Status:** Women who reported smoking cigarettes on the birth certificate.

$$\frac{\text{Number of women who reporting smoking cigarettes} \times 100}{\text{Number of (Medicaid, Non-Medicaid, or total as indicated) deliveries*}}$$